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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,958	02/20/2004	Robert S. Whitehouse	14074-007001	4826
26161	7590	11/28/2006	EXAMINER	
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			HAIDER, SAIRA BANO	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/783,958	<b>Applicant(s)</b> WHITEHOUSE, ROBERT S.	
	<b>Examiner</b> Saira Haider	<b>Art Unit</b> 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-80 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-80 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/5/2006 has been entered.

### *Claim Rejections - 35 USC § 102*

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-18, 20-80 are rejected under 35 U.S.C. 102(a) and 120(e) as being anticipated by Whitehouse et al. (US 2002/0068810 A1).
4. The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.
5. Whitehouse et al. discloses polyhydroxyalkanoate compositions including hot melt adhesive compositions, biodegradable wax compositions, and protective coating compositions are provided and include a low molecular weight polyhydroxyalkanoate, a terminally-modified polyhydroxyalkanoate, or both. Methods of protecting an article are provided and include coating or

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encapsulating the article with a composition containing a low molecular weight polyhydroxyalkanoate, a terminally-modified polyhydroxyalkanoate, or both [abstract].

6. Whitehouse et al. discloses preferred PHA's such as a copolymer of 3-hydroxybutyric acid and 4-hydroxybutyric acid [0046]. Wherein the number average molecular weight of the PHA's is from about 500 to under 50,000 [0012]. This falls within the claimed range of applicants weight average molecular weight and polydispersity. Whitehouse et al. discloses that the PHA's have the following properties: glass transition temperatures between about -55°C and 5°C, and degrees of crystallinity between about 0% and 80% [0109]. It is noted that since the claimed properties of applicant's fall within the range disclosed by the prior art the claimed ranges are anticipated. Whitehouse et al. discloses that PHB has a glass transition temperature of 5°C [0110].

7. Whitehouse et al. discloses that the PHA is contained in the dispersion in an amount higher than about 65% [0167].

8. Whitehouse et al. discloses that the adhesive composition can contain two different PHA's [0046], since Whitehouse et al. discloses that the number average molecular weight is in the range of 500 to under 50,000, it is clear that Whitehouse would readily envisage an adhesive composition containing two PHA's wherein the weight average molecular weight could differ a maximum of 49,500. This difference falls within applicant's claimed number average molecular weight range, given applicant's polydispersity.

9. The PHA compositions of Whitehouse et al. can be prepared using PHAs in their solid form, in a latex form, in aqueous dispersions, or in solution, for example, dissolved in a solvent such as acetone [0108]. Additionally, Whitehouse et al. discloses that the polyhydroxyalkanoate composition can be dissolved in a solvent or a mixture of solvents (claim 12).

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10. Whitehouse et al. discloses that the hot melt adhesive compositions of the present invention may also include other components such as a reactive monomer component, a wax component, a tackifier, and other additives [0117]. It is noted that applicant has claimed "at most about [x] weight percent of adhesive additives (claims 27-30). It is the examiner's position that "at most" is linguistically equivalent to "up to," hence allows for zero weight percent of adhesive additives.

11. Whitehouse et al. discloses that the inventive hot melt adhesives are ideally suited for use in the packaging industry for case and carton sealing and for tray forming. These adhesives may also bond composite materials such as those types of packages used for packaging of alcoholic beverages. These composite materials may include chipboard laminated with an aluminum foil which is further laminated to film materials such as polyethylene, mylar, polypropylene, polyvinylidene chloride, ethylene vinyl acetate and various other types of films. Such film materials may also be bonded directly to chipboard or kraft in the absence of aluminum foil. One of ordinary skill in the art would recognize that a variety of substrates are used in the packaging industry to which the hot melt adhesives of the present invention may adhere [0151].

12. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehouse et al. in view of Procter & Gamble. Procter & Gamble (WO 97/04036) can be found on the applicant's Form PTO-1449.

13. Whitehouse et al. applies as above, teaching chloroform solvents but failing to teach aqueous solvents or aqueous mixtures. Procter & Gamble teaches PHA adhesives for non-woven substrates, where mixtures of organic solvents, including chloroform, and water are used to form dispersions (abstract; p. 16, line 1-p. 17 line 6). Because water is included, the adhesives are more environmentally friendly. Therefore, it is the examiner's position that it would have been prima facie

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obvious to use mixtures of immiscible organic solvents and water in the adhesives of the Whitehouse et al. invention to form environmentally-friendly adhesive dispersions.


***Response to Arguments***

14. Applicant's arguments with respect to claims 1-75 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saira Haider whose telephone number is (571) 272-3553. The examiner can normally be reached on Monday-Friday from 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
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Art Unit 1711